

✓ --33. A combination of epitopes of the tau protein which are specifically occur in a phosphorylated state in tau protein in Alzheimer paired helical filaments, said combination including one or more phosphorylatable serine residues selected from the group consisting of tau amino acid residues 46, 199, 202, 235, 262, 293, 324, 356, 396, 404 and/or 422 and/or one or more phosphorylatable threonine residues selected from the group consisting of tau amino acid residues 50, 69, 111, 153, 175, 181, 205, 212, 217 and/or 231, with the proviso that said combination is not the combination Ser 202, Ser 235, Ser 404, Thr 205.

B 34. The combination according to claim 1 which contains an epitope selected from the group consisting of

Lys-Glu-Ser-Pro-Leu-Gln (residues 44-49 in SEQ ID NO:1).

Tyr-Ser-Ser-Pro-Gly-Ser-Pro (residues 197-203 in SEQ ID NO:1).

Pro-Gly-Ser-Pro-Gly-Thr (residues 200-205 in SEQ ID NO:1).

Tyr-Ser-Ser-Pro-Gly-Ser-Pro-Gly-Thr-Pro-Gly-Ser (residues 197-208 in SEQ ID NO:1),

Pro-Lys-Ser-Pro-Ser-Ser (residues 233-238 in SEQ ID NO:1),

[Tyr-Lys-Ser-Pro-Val-Val-Ser (residues 394-400 in SEQ ID NO:1),]

Gly Asp Thr Ser Pro Arg His (residues 401-407 in SEQ ID NO:1),

Met-Val-Asp-Ser-Pro-Gln-Leu (residues 419-425 in SEQ ID NO:1),

Pro-Leu-Gln-Thr-Pro-Thr-Glu (residues 47-53 in SEQ ID NO:1),

Leu-Lys-Glu-Ser-Pro-Leu-Gln-Thr-Pro-Thr-Glu-Asp (residues 43-54 in SEQ ID NO:1),

Ala-Lys-Ser-Thr-Pro-Thr-Ala (residues 66-72 in SEQ ID NO:1),

Ile-Gly-Asp-Thr-Pro-Ser-Leu (residues 108-114 in SEQ ID NO:1),

Lys-Ile-Ala-Thr-Pro-Arg-Gly-Ala (residues 150-157 in SEQ ID NO:1),

Pro-Ala-Lys-Thr-Pro-Pro-Ala (residues 172-178 in SEQ ID NO:1),

Ala-Pro-Lys-Thr-Pro-Pro-Ser (residues 178-184 in SEQ ID NO:1),

Pro-Ala-Lys-Thr-Pro-Pro-Ala-Pro-Lys-Thr-Pro-Pro-Ser (residues 172-184 in SEQ ID NO:1),

Ser-Pro-Gly-Thr-Pro-Gly-Ser (residues 202-208 in SEQ ID NO:1),

Arg-Ser-Arg-Thr-Pro-Ser-Leu (residues 209-215 in SEQ ID NO:1),
Ser-Leu-Pro-Thr-Pro-Pro-Thr (residues 214-220 in SEQ ID NO:1),
Arg-Ser-Arg-Thr-Pro-Ser-Leu-Pro-Pro-Thr-Pro-Pro-Thr (residues 209-220 in
SEQ ID NO:1),
Val-Val-Arg-Thr-Pro-Pro-Lys (residues 228-234 in SEQ ID NO:1),
Val Val Arg Thr Pro Pro Lys Ser Pro Ser Ser Ala (residues 228-239 in SEQ ID
NO:1),
Lys-Ile-Gly-Ser-Thr-Glu-Asn-Leu-Lys (residues 259-267 in SEQ ID NO:1),
Lys-Cys-Gly-Ser-Lys-Asp-Asn-Ile-Lys (residues 290-298 in SEQ ID NO:1),
Lys-Cys-Gly-Ser-Leu-Gly-Asn-Ile-His (residues 321-329 in SEQ ID NO:1), and
Lys-Ile-Gly-Ser-Leu-Asp-Asn-Ile-Thr-His. (residues 353-362 in SEQ ID NO:1).

35. A pharmaceutical composition containing a specific inhibitor for a protein kinase, said inhibitor comprising a combination of oligo- or polypeptides comprising an epitope according to claim 33 or 34.

36. A antibody which specifically recognizes an epitope contained in the combination according to claim 33 or 34

REMARKS

The Applicants would like to thank the Examiner for bringing to the attention of the undersigned the overlapping subject matter in the co-pending applications.

Support for the new claims can be found throughout the specification and each corresponds essentially to a claim in the application as originally filed. Minor differences reflect changes to provide proper Markush language. Specifically, claim 33 corresponds to the subject matter in claim 1 as originally filed (and cancelled by preliminary amendment); claim 34 corresponds to the subject matter in claim 2 as originally filed (also cancelled by preliminary amendment); claim 35 corresponds to the subject matter in claim 2 as originally filed (also cancelled by preliminary amendment);